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BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD			SHECHTMAN, SEAN P	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 10/606,514

Filing Date: June 25, 2003

Appellant(s): DE LORENZO ET AL.

JUL 0 5 2005

**Technology Center 2100** 

BLAKELY SOKOLOFF TAYLOR & ZAFMAN For Appellant

**EXAMINER'S ANSWER** 

Application/Control Number: 10/606,514

Art Unit: 2125

This is in response to the appeal brief filed May 16<sup>th</sup> 2005.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

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(3) Status of Claims

The statement of the status of the claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 1-36 are pending in the case. Claims 1-7, 13-19, and 25-31 stand rejected.

Claims 8-12, 20-24, and 32-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The rejections of claims 1-7, 13-19, and 25-31 are being appealed.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

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## (7) Grouping of Claims

The rejection of claims 1-7, 13-19, and 25-31 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

# (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (9) Prior Art of Record

6,470,238

Nizar et al.

10-2002

## (10) Grounds of Rejection

Claims 1-7, 13-19, and 25-31 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,470,238 to Nizar et al.

The applied reference has a common assignee with the instant application as of February 5<sup>th</sup> 2005. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Referring to claims 1, 13, and 25, Nizar et al. teaches an apparatus, method and system, comprising:

a device having a thermal characteristic which is dependent on a number of times the device is accessed over a period of time (Col. 12, lines 8-44); and

a controller connected to the device and adapted to control access to the device (Col. 11, line 52 – Col. 12, line 2; Figs. 1A or 2A, the weighted counter is an embodiment of the throttle logic),

wherein the controller is adapted to calculate a temperature estimate of the device and to control access to the device in accordance with the calculated temperature estimate (Col. 11, line 52 – Col. 12, line 2).

Referring to claims 2, 14, and 26, Nizar et al. teaches an apparatus, method and system above, wherein the controller is adapted to receive an access request (cover figure, Col. 1, lines 29-32), calculate the temperature estimate in accordance with the access request (Col. 2, lines 1-14; Col. 12, lines 3-28), determine if the temperature estimate exceeds a temperature threshold, and impose an access request budget if the temperature estimate exceeds the temperature threshold (Col. 5, lines 50-63; Col. 3, lines 4-25).

Referring to claims 3, 15, and 27, Nizar et al. teaches an apparatus, method and system above, wherein the controller is adapted to process the access request without an access request budget if the temperature estimate does not exceed the temperature threshold (Fig. 6; Col. 11, lines 13-51; Col. 3, lines 26-31).

Referring to claims 4, 16, and 28, Nizar et al. teaches an apparatus, method and system above, wherein the controller is adapted to process the request in accordance with the imposed access request budget if the temperature estimate exceeds the temperature threshold (Fig. 6; Col. 11, lines 13-51; Col. 3, lines 26-31).

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Referring to claims 5, 17, and 29, Nizar et al. teaches an apparatus, method and system above, wherein the controller is adapted to calculate a new access request budget each time the access request budget is imposed (Col. 8, lines 63-65).

Referring to claims 6, 18, and 30, Nizar et al. teaches an apparatus, method and system above, wherein the controller is adapted to calculate a new access request budget periodically (Fig. 1B; Col. 11, lines 60-61; Col. 3, lines 16-25).

Referring to claims 7, 19, and 31, Nizar et al. teaches an apparatus, method and system above, wherein the controller is adapted to calculate the new access request budget when a parameter involved in the calculation is updated (Col. 11, line 52 – Col. 12, line 2; Col. 8, lines 28-40; Col. 7, lines 60-67).

## (11) Response to Argument

It is applicant's duty to review the entire reference. Applicant states that the reference is not understood. For applicant's convenience further explanation is provided.

#### Claims 1, 13, and 25

Applicant argues that Nizar et al. fails to teach calculating a temperature estimate. The examiner respectfully disagrees. Nizar et al. clearly teaches that "package and die temperatures can be predicted by summing" (Col. 11, line 52 – Col. 12, line 2). The examiner respectfully submits that the package and die is a device, a prediction is an estimate, and summing is a calculation. Thus, the examiner respectfully submits that package and die temperatures predicted by summing is a device temperature estimated by a calculation.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., using the

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predicted temperature to control access to the device) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPO2d 1057 (Fed. Cir. 1993).

Applicant argues that Nizar et al. does not teach controlling access to the device in accordance with the calculated temperature estimate. Applicant argues that the controller described in Nizar et al. controls access to the package/die based on the throttle counter limit and determined maximum amount of traffic, and not based on any calculated temperature estimate. The examiner respectfully disagrees. Nizar et al. clearly teaches the throttle counter limit is set to keep the package temperature within its limit (Col. 12, lines 1-2). The examiner respectfully submits that controlling access to the package/die based on the throttle counter limit where the throttle counter limit set to keep the package temperature within its limit is controlling access to the device in accordance with the calculated temperature estimate.

#### Claims 2-5, 14-17, and 26-29

Applicant argues that Nizar et al. does not teach receiving an access request. The examiner respectfully disagrees. Nizar et al. clearly shows receiving an access request in the cover figure.

Applicant argues that Nizar et al. fails to mention the words 'access request'. The examiner respectfully disagrees. Nizar et al. clearly shows the words 'access request' in the cover figure.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., comparing a Art Unit: 2125

temperature estimate to a temperature threshold) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that Nizar et al. fails to teach the conditions under which the access budget is imposed. The claims, as such, do not require imposing an access budget if the temperature estimate does not exceed the temperature threshold. Nizar et al. clearly teaches that the throttling logic monitors the temperature of the device and determines that the device is approaching its thermal specification (Col. 3, lines 4-25). The examiner respectfully submits that the throttling logic monitoring the temperature of the device and determining that the device is approaching its thermal specification is determining that the temperature estimate has not exceeded a temperature threshold.

#### Claims 6-7, 18-19, and 30-31

Applicant argues that Nizar et al. fails to teach calculating a new access request budget periodically and when a parameter involved in the calculation is updated. The examiner respectfully disagrees. Nizar et al. clearly teaches the throttling for a pre-determined number of access requests in column 3, lines 16-25. Nizar et al. goes on to teach how these pre-determined number of access requests are calculated, for example, in column 8, lines 28-40 Nizar et al. teaches for each and every write throttle monitoring window (i.e., period, column 7, lines 60-67) a budget of maximum write data transfers (i.e., write requests) is allocated, wherein Nizar et al. goes on to teach how this budget is calculated in accordance with the throttle monitoring window

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and based on the bandwidth desired while throttling (updated parameter) in column 8, lines 35-

40.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Sean Shechtman June 10, 2005

Conferees

Leo Picard (SPE)

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J- P. P-

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